

- (1) the degree to which projects will have a broad impact on manufacturing;
- (2) the novelty and scientific and technical merit of the proposed projects; and
- (3) the demonstrated capabilities of the applicants to successfully carry out the proposed research.

(e) Distribution

In selecting applications under this section the Director shall ensure, to the extent practicable, a distribution of overall awards among a variety of manufacturing industry sectors and a range of firm sizes.

(f) Duration

In carrying out this section, the Director shall run a single pilot competition to solicit and make awards. Each award shall be for a 3-year period.

(Mar. 3, 1901, ch. 872, §33, as added Pub. L. 110-69, title III, §3007(2), Aug. 9, 2007, 121 Stat. 591.)

§ 278s. Network for Manufacturing Innovation

(a) Establishment of Network for Manufacturing Innovation Program

(1) In general

The Secretary shall establish within the Institute a program to be known as the “Network for Manufacturing Innovation Program” (referred to in this section as the “Program”).

(2) Purposes of Program

The purposes of the Program are—

- (A) to improve the competitiveness of United States manufacturing and to increase the production of goods manufactured predominantly within the United States;
- (B) to stimulate United States leadership in advanced manufacturing research, innovation, and technology;
- (C) to facilitate the transition of innovative technologies into scalable, cost-effective, and high-performing manufacturing capabilities;
- (D) to facilitate access by manufacturing enterprises to capital-intensive infrastructure, including high-performance electronics and computing, and the supply chains that enable these technologies;
- (E) to accelerate the development of an advanced manufacturing workforce;
- (F) to facilitate peer exchange of and the documentation of best practices in addressing advanced manufacturing challenges;
- (G) to leverage non-Federal sources of support to promote a stable and sustainable business model without the need for long-term Federal funding; and
- (H) to create and preserve jobs.

(3) Support

The Secretary, acting through the Director, shall carry out the purposes set forth in paragraph (2) by supporting—

- (A) the Network for Manufacturing Innovation established under subsection (b); and
- (B) the establishment of centers for manufacturing innovation.

(4) Director

The Secretary shall carry out the Program through the Director.

(b) Establishment of Network for Manufacturing Innovation

(1) In general

As part of the Program, the Secretary shall establish a network of centers for manufacturing innovation.

(2) Designation

The network established under paragraph (1) shall be known as the “Network for Manufacturing Innovation” (referred to in this section as the “Network”).

(c) Centers for manufacturing innovation

(1) In general

For purposes of this section, a “center for manufacturing innovation” is a center that—

(A) has been established by a person or group of persons to address challenges in advanced manufacturing and to assist manufacturers in retaining or expanding industrial production and jobs in the United States;

(B) has a predominant focus on a manufacturing process, novel material, enabling technology, supply chain integration methodology, or another relevant aspect of advanced manufacturing, such as nanotechnology applications, advanced ceramics, photonics and optics, composites, biobased and advanced materials, flexible hybrid technologies, and tool development for microelectronics;

(C) as determined by the Secretary, has the potential—

(i) to improve the competitiveness of United States manufacturing, including key advanced manufacturing technologies such as nanotechnology, advanced ceramics, photonics and optics, composites, biobased and advanced materials, flexible hybrid technologies, and tool development for microelectronics;

(ii) to accelerate non-Federal investment in advanced manufacturing production capacity in the United States; or

(iii) to enable the commercial application of new technologies or industry-wide manufacturing processes; and

(D) includes active participation among representatives from multiple industrial entities, research universities, community colleges, and such other entities as the Secretary considers appropriate, which may include industry-led consortia, career and technical education schools, Federal laboratories, State, local, and tribal governments, businesses, educational institutions, and nonprofit organizations.

(2) Activities

Activities of a center for manufacturing innovation may include the following:

(A) Research, development, and demonstration projects, including proof-of-concept development and prototyping, to reduce the cost, time, and risk of commercializing new technologies and improvements in existing technologies, processes, products, and research and development of materials to solve precompetitive industrial problems

with economic or national security implications.

(B) Development and implementation of education, training, and workforce recruitment courses, materials, and programs.

(C) Development of innovative methodologies and practices for supply chain integration and introduction of new technologies into supply chains.

(D) Outreach and engagement with small and medium-sized manufacturing enterprises, including women and minority owned manufacturing enterprises, in addition to large manufacturing enterprises.

(E) Such other activities as the Secretary, in consultation with Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing, considers consistent with the purposes described in subsection (a)(2).

(3) Additional centers for manufacturing innovation

(A) In general

The National Additive Manufacturing Innovation Institute and other manufacturing centers formally recognized as manufacturing innovation centers pursuant to Federal law or executive actions, or under pending interagency review for such recognition as of December 16, 2014, shall be considered centers for manufacturing innovation, but such centers shall not receive any financial assistance under subsection (d).

(B) Network participation

A manufacturing center that is substantially similar to those established under this subsection but that does not receive financial assistance under subsection (d) may, upon request of the center, be recognized as a center for manufacturing innovation by the Secretary for purposes of participation in the Network.

(d) Financial assistance to establish and support centers for manufacturing innovation

(1) In general

In carrying out the Program, the Secretary shall award financial assistance to a person or group of persons to assist the organization in planning, establishing, or supporting a center for manufacturing innovation.

(2) Application

A person or group of persons seeking financial assistance under paragraph (1) shall submit to the Secretary an application therefor at such time, in such manner, and containing such information as the Secretary may require. The application shall, at a minimum, describe the specific sources and amounts of non-Federal financial support for the center on the date financial assistance is sought, as well as the anticipated sources and amounts of non-Federal financial support during the period for which the center could be eligible for continued Federal financial assistance under this section.

(3) Open process

In soliciting applications for financial assistance under paragraph (1), the Secretary

shall ensure an open process that will allow for the consideration of all applications relevant to advanced manufacturing regardless of technology area.

(4) Selection

(A) Competitive, merit review

In awarding financial assistance under paragraph (1), the Secretary shall use a competitive, merit review process that includes peer review by a diverse group of individuals with relevant expertise from both the private and public sectors.

(B) Participation in process

(i) In general

No political appointee may participate on a peer review panel. The Secretary shall implement a conflict of interest policy that ensures public transparency and accountability, and requires full disclosure of any real or potential conflicts of interest on the parts of individuals that participate in the merit selection process.

(ii) Definition

For purposes of this subparagraph, the term “political appointee” means any individual who—

(I) is employed in a position described under sections 5312 through 5316 of title 5 (relating to the Executive Schedule);

(II) is a limited term appointee, limited emergency appointee, or noncareer appointee in the Senior Executive Service, as defined under paragraphs (5), (6), and (7), respectively, of section 3132(a) of title 5; or

(III) is employed in a position in the executive branch of the Government of a confidential or policy-determining character under schedule C of subpart C of part 213 of title 5 of the Code of Federal Regulations.

(C) Performance measurement, transparency, and accountability

For each award of financial assistance under paragraph (1), the Secretary shall—

(i) make publicly available at the time of the award a description of the bases for the award, including an explanation of the relative merits of the winning applicant as compared to other applications received, if applicable; and

(ii) develop and implement metrics-based performance measures to assess the effectiveness of the activities funded.

(D) Collaboration

In awarding financial assistance under paragraph (1), the Secretary shall, acting through the National Program Office established under subsection (f)(1), collaborate with Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing.

(E) Considerations

In selecting a person who submitted an application under paragraph (2) for an award of financial assistance under paragraph (1), the

Secretary shall consider, at a minimum, the following:

(i) The potential of the center for manufacturing innovation to advance domestic manufacturing and the likelihood of economic impact, including the creation or preservation of jobs, in the predominant focus areas of the center for manufacturing innovation.

(ii) The commitment of continued financial support, advice, participation, and other contributions from non-Federal sources, to provide leverage and resources to promote a stable and sustainable business model without the need for long-term Federal funding.

(iii) Whether the financial support provided to the center for manufacturing innovation from non-Federal sources significantly exceeds the requested Federal financial assistance.

(iv) How the center for manufacturing innovation will increase the non-Federal investment in advanced manufacturing research in the United States.

(v) How the center for manufacturing innovation will engage with small and medium-sized manufacturing enterprises, to improve the capacity of such enterprises to commercialize new processes and technologies.

(vi) How the center for manufacturing innovation will carry out educational and workforce activities that meet industrial needs related to the predominant focus areas of the center.

(vii) How the center for manufacturing innovation will advance economic competitiveness and generate substantial benefits to the Nation that extend beyond the direct return to participants in the Program.

(viii) Whether the predominant focus of the center for manufacturing innovation is a manufacturing process, novel material, enabling technology, supply chain integration methodology, or other relevant aspect of advanced manufacturing that has not already been commercialized, marketed, distributed, or sold by another entity.

(ix) How the center for manufacturing innovation will strengthen and leverage the assets of a region.

(x) How the center for manufacturing will encourage the education and training of veterans and individuals with disabilities.

(5) Limitations on awards

(A) In general

No award of financial assistance may be made under paragraph (1) to a center of manufacturing innovation after the 7-year period beginning on the date on which the Secretary first awards financial assistance to that center under that paragraph.

(B) Matching funds and preferences

The total Federal financial assistance awarded to a center of manufacturing innovation, including the financial assistance

under paragraph (1), in a given year shall not exceed 50 percent of the total funding of the center in that year, except that the Secretary may make an exception in the case of large capital facilities or equipment purchases. The Secretary shall give weighted preference to applicants seeking less than the maximum Federal share of funds allowed under this paragraph.

(C) Funding decrease

The amount of financial assistance provided to a center of manufacturing innovation under paragraph (1) shall decrease after the second year of funding for the center, and shall continue to decrease thereafter in each year in which financial assistance is provided, unless the Secretary determines that—

(i) the center is otherwise meeting its stated goals and metrics under this section;

(ii) unforeseen circumstances have altered the center's anticipated funding; and

(iii) the center can identify future non-Federal funding sources that would warrant a temporary exemption from the limitations established in this subparagraph.

(e) Funding

(1) General rule

Except as provided in paragraph (2), no funds are authorized to be appropriated by the Revitalize American Manufacturing and Innovation Act of 2014 for carrying out this section.

(2) Authority

(A) NIST industrial technical services account

To the extent provided for in advance by appropriations Acts, the Secretary may use not to exceed \$5,000,000 for each of the fiscal years 2015 through 2024 to carry out this section from amounts appropriated to the Institute for Industrial Technical Services.

(B) Energy efficiency and renewable energy account

To the extent provided for in advance by appropriations Acts, the Secretary of Energy may transfer to the Institute not to exceed \$250,000,000 for the period encompassing fiscal years 2015 through 2024 for the Secretary to carry out this section from amounts appropriated for advanced manufacturing research and development within the Energy Efficiency and Renewable Energy account for the Department of Energy.

(f) National Program Office

(1) Establishment

The Secretary shall establish, within the Institute, the National Office of the Network for Manufacturing Innovation Program (referred to in this section as the "National Program Office"), which shall oversee and carry out the Program.

(2) Functions

The functions of the National Program Office are—

(A) to oversee the planning, management, and coordination of the Program;

(B) to enter into memorandums of understanding with Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing, to carry out the purposes described in subsection (a)(2);

(C) to develop, not later than 1 year after December 16, 2014, and update not less frequently than once every 3 years thereafter, a strategic plan to guide the Program;

(D) to establish such procedures, processes, and criteria as may be necessary and appropriate to maximize cooperation and coordinate the activities of the Program with programs and activities of other Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing;

(E) to establish a clearinghouse of public information related to the activities of the Program; and

(F) to act as a convener of the Network.

(3) Recommendations

In developing and updating the strategic plan under paragraph (2)(C), the Secretary shall solicit recommendations and advice from a wide range of stakeholders, including industry, small and medium-sized manufacturing enterprises, research universities, community colleges, and other relevant organizations and institutions on an ongoing basis.

(4) Report to Congress

Upon completion, the Secretary shall transmit the strategic plan required under paragraph (2)(C) to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

(5) Hollings Manufacturing Extension Partnership

The Secretary shall ensure that the National Program Office incorporates the Hollings Manufacturing Extension Partnership into Program planning to ensure that the results of the Program reach small and medium-sized entities.

(6) Detailees

Any Federal Government employee may be detailed to the National Program Office without reimbursement. Such detail shall be without interruption or loss of civil service status or privilege.

(g) Reporting and auditing

(1) Annual reports to the Secretary

(A) In general

The Secretary shall require each recipient of financial assistance under subsection (d)(1) to annually submit a report to the Secretary that describes the finances and performance of the center for manufacturing innovation for which such assistance was awarded.

(B) Elements

Each report submitted under subparagraph (A) shall include—

(i) an accounting of expenditures of amounts awarded to the recipient under subsection (d)(1); and

(ii) consistent with the metrics-based performance measures developed and implemented by the Secretary under this section, a description of the performance of the center for manufacturing innovation with respect to—

(I) its goals, plans, financial support, and accomplishments; and

(II) how the center for manufacturing innovation has furthered the purposes described in subsection (a)(2).

(2) Annual reports to Congress

(A) In general

Not less frequently than once each year until December 31, 2024, the Secretary shall submit a report to Congress that describes the performance of the Program during the most recent 1-year period.

(B) Elements

Each report submitted under subparagraph (A) shall include, for the period covered by the report—

(i) a summary and assessment of the reports received by the Secretary under paragraph (1);

(ii) an accounting of the funds expended by the Secretary under the Program, including any temporary exemptions granted from the requirements of subsection (d)(5)(C);

(iii) an assessment of the participation in, and contributions to, the Network by any centers for manufacturing innovation not receiving financial assistance under subsection (d)(1); and

(iv) an assessment of the Program with respect to meeting the purposes described in subsection (a)(2).

(3) Assessments by GAO

(A) Assessments

Not less frequently than once every 2 years, the Comptroller General shall submit to Congress an assessment of the operation of the Program during the most recent 2-year period.

(B) Final assessment

Not later than December 31, 2024, the Comptroller General shall submit to Congress a final report regarding the overall success of the Program.

(C) Elements

Each assessment submitted under subparagraph (A) or (B) shall include, for the period covered by the report—

(i) a review of the management, coordination, and industry utility of the Program;

(ii) an assessment of the extent to which the Program has furthered the purposes described in subsection (a)(2);

(iii) such recommendations for legislative and administrative action as the Comptroller General considers appropriate to improve the Program; and

(iv) an assessment as to whether any prior recommendations for improvement made by the Comptroller General have been implemented or adopted.

(h) Additional authorities**(1) Appointment of personnel and contracts**

The Secretary may appoint such personnel and enter into such contracts, financial assistance agreements, and other agreements as the Secretary considers necessary or appropriate to carry out the Program, including support for research and development activities involving a center for manufacturing innovation.

(2) Transfer of funds

Of amounts available under the authority provided by subsection (e), the Secretary may transfer to other Federal agencies such sums as the Secretary considers necessary or appropriate to carry out the Program. No funds so transferred may be used to reimburse or otherwise pay for the costs of financial assistance incurred or commitments of financial assistance made prior to December 16, 2014.

(3) Authority of other agencies

In the event that the Secretary exercises the authority to transfer funds to another agency under paragraph (2), such agency may accept such funds to award and administer, under the same conditions and constraints applicable to the Secretary, all aspects of financial assistance awards under this section.

(4) Use of resources

In furtherance of the purposes of the Program, the Secretary may use, with the consent of a covered entity and with or without reimbursement, the land, services, equipment, personnel, and facilities of such covered entity.

(5) Acceptance of resources

In addition to amounts appropriated to carry out the Program, the Secretary may accept funds, services, equipment, personnel, and facilities from any covered entity to carry out the Program, subject to the same conditions and constraints otherwise applicable to the Secretary under this section and such funds may only be obligated to the extent provided for in advance by appropriations Acts.

(6) Covered entity

For purposes of this subsection, a covered entity is any Federal department, Federal agency, instrumentality of the United States, State, local government, tribal government, territory, or possession of the United States, or of any political subdivision thereof, or international organization, or any public or private entity or individual.

(i) Patents

Chapter 18 of title 35 shall apply to any funding agreement (as defined in section 201 of that title) awarded to new or existing centers for manufacturing innovation.

(Mar. 3, 1901, ch. 872, §34, as added Pub. L. 113-235, div. B, title VII, §703(2), Dec. 16, 2014, 128 Stat. 2221.)

REFERENCES IN TEXT

The Revitalize American Manufacturing and Innovation Act of 2014, referred to in subsec. (e)(1), is title VII of div. B. of Pub. L. 113-235, Dec. 16, 2014, 128 Stat. 2220.

For complete classification of this Act to the Code, see Short Title note under section 271 of this title and Tables.

PRIOR PROVISIONS

A prior section 34 of act Mar. 3, 1901, ch. 872, was renumbered section 35 and is set out as a Short Title note under section 271 of this title.

FINDINGS

Pub. L. 113-235, div. B, title VII, §702, Dec. 16, 2014, 128 Stat. 2220, provided that: “Congress finds the following:

“(1) In 2012, manufacturers contributed \$2.03 trillion to the economy, or 1/8 of United States Gross Domestic Product.

“(2) For every \$1.00 spent in manufacturing, another \$1.32 is added to the economy, the highest multiplier effect of any economic sector.

“(3) Manufacturing supports an estimated 17,400,000 jobs in the United States—about 1 in 6 private-sector jobs. More than 12,000,000 Americans (or 9 percent of the workforce) are employed directly in manufacturing.

“(4) In 2012, the average manufacturing worker in the United States earned \$77,505 annually, including pay and benefits. The average worker in all industries earned \$62,063.

“(5) Taken alone, manufacturing in the United States would be the 8th largest economy in the world.

“(6) Manufacturers in the United States perform two-thirds of all private-sector research and development in the United States, driving more innovation than any other sector.”

§ 279. Absence of Director

In the case of the absence of the Director of the National Institute of Standards and Technology the Secretary of Commerce may designate some officer of said Institute to perform the duties of the director during his absence.

(Mar. 4, 1911, ch. 237, §1, 36 Stat. 1231; Mar. 4, 1913, ch. 141, §1, 37 Stat. 736; Pub. L. 100-418, title V, §5115(c), Aug. 23, 1988, 102 Stat. 1433.)

CODIFICATION

Section was not enacted as part of the National Institute of Standards and Technology Act which comprises this chapter.

AMENDMENTS

1988—Pub. L. 100-418 substituted “National Institute of Standards and Technology” for “Bureau of Standards” and “Institute” for “bureau”.

CHANGE OF NAME

Act Mar. 4, 1913, substituted “Secretary of Commerce” for “Secretary of Commerce and Labor”.

§§ 280, 281. Repealed. Pub. L. 100-418, title V, § 5113, Aug. 23, 1988, 102 Stat. 1432

Section 280, acts July 16, 1914, ch. 141, §1, 38 Stat. 502; 1978 Reorg. Plan No. 2, §102, 43 F.R. 36037, 92 Stat. 3783, related to promotion of apprentices in National Bureau of Standards.

Section 281, acts Mar. 4, 1913, ch. 150, §1, 37 Stat. 945; 1967 Reorg. Plan No. 3, §401, eff. Aug. 11, 1967, 32 F.R. 11669, 81 Stat. 948; Dec. 24, 1973, Pub. L. 93-198, title IV, §421, title VII, §711, 87 Stat. 789, 818, related to testing of building and other structural materials for District of Columbia.

§ 281a. Structural failures

The National Institute of Standards and Technology, on its own initiative but only after consultation with local authorities, may initiate